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OWENS CORNING 2790 COLUMBUS ROAD GRANVILLE, OH 43023			EXAMINER CHAPMAN, JEANETTE E	
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/664,552  
Filing Date: September 18, 2003  
Appellant(s): ELLIOTT ET AL.

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Joan Drew  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 6/18/09 appealing from the Office action  
mailed July 22.2008.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6,220,329	KING ET AL	4-2001
6,174,403	STEINER ET AL	4-2001

4,148,168

DIAMOND

4-1979

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 5, 13-14, 21, 28-30, 32-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diamond (4148168) in view of King et al (6220329) and Steiner, Jr. et al (6174403). Diamond discloses a method of covering a roof deck comprising:

- Laying a plurality of successive horizontal courses of covering shingles above a starter shingles laid in a side-by-side relationship at an eave edge of a roof deck; see figure 4A;
- The covering singles laid in a side-by-side relationship and horizontally offset from the covering shingles in adjacent courses;
- Each covering shingle includes a headlap portion and a butt portion; • The butt portion includes a plurality of tabs 22 separated by cutouts 14A; • Diamond shows a difference in height between the covering and starter shingle; the exact difference has been considered a matter of choice; one of ordinary skill in the art would have appreciated any height difference which would provide for the intended purpose and function of the method • The butt portions of the starter shingles have an overall color appearance that is similar to an overall color appearance of the covering shingles

Diamond lacks the starter shingle of the course of starter shingles is a laminated starter shingles comprising an underlay and overlay sheet. Diamond also lacks the starter shingle including an exposed portion extending between tabs of the covering shingles.

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Steiner et al discloses laminated shingle layers. See column 2, line 33-42, column 14, line 33-34, column 15, lines 1-4, 8-21, more particularly, lines 8-10 and 20-21, and lines 40-44. Steiner discloses the laminated shingle layers of various heights; hence one layer can be greater than another; the amount or exact measurement of difference has been considered a matter of choice. One of ordinary skill in the art would have appreciated that change in height causes variations in appearance. See column 2, line 63 through column 3, line 15.

King also discloses the starter/covering shingle including an exposed portion extending between tabs of the covering shingles. See figures 6-7. The shingle is a laminated shingle with an overlay member 122/124 having a headlap and a butt portion 128/132; the underlay member 126 is attached to the rear surface of the butt portion 132/128 of the overlay member 122/124 because the underlay member 126 and the overlay member 124/122 define a laminated covering shingle. The butt portion includes a plurality of tabs 132/128 separated by cutouts 130/134 and the cutouts 130/134 extending through the laminated covering shingle wherein the exposed portion of the starter shingle, underlay, 126 extends between the tabs of the covering shingles. See figures 6-7. King also discloses the butt portion including a butt edge and the underlay sheet includes a lower edge. The lower edge and the butt edge are vertically aligned to define a lower edge. The lower edge of the covering shingles in the first course is vertically aligned with the lower edge of the starter shingles. See figure 10b, 11b and 6-7. King et al discloses applying a bead of adhesive to a bottom surface of the underlay sheet; see figures 10b and 11b.

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In view of the above, it would have been obvious to modify Diamond to include a laminated starter strip and to include the exposed portion of the shingle to strengthen the shingle structure and to provide a more decorative appearance to the shingle structure when applied to any substrate. It would have also been obvious to make the laminate layers of different heights to effect a different and enhanced appearance as taught by Steiner, Jr. et al.

#### **(10) Response to Argument**

The examiner rejects claims 5, 13-14, 21, 28-30, and 32-40 under 35 U.S.C. § 103(a) over Diamond in view of King and Steiner.

Note the rejection is a combination of three references and not just Diamond in view of King or just King alone.

Steiner teaches the laminated shingles and the various heights of the different layers of laminate for a shingle. See column 2, line 33-42, column 14, line 33-34, column 15, lines 1-4, 8-21, more particularly lines 8-10 and 20-21, and lines 40-44. King et al discloses the covering or starter shingle which is laminated with an overlay and an underlay. The overlay portion includes a headlap and a butt portion. The underlay portion is attached to the rear surface of the butt portion of the overlay member; again, the laminated covering shingle comprises an underlay and an overlay member, 126 and 122/124, respectively. The overlay portion 124/122 includes a plurality of tabs 128/132 separated by cutouts 130/134.

Applicant argues, “the King reference does not disclose a laminated starter shingle. Rather, the King reference discloses a three-layered laminated covering roofing

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shingle. Applicant asserts a covering roofing shingle is different, both structurally and functionally, from a starter shingle. There are a number of reasons why the skilled artisan would conclude that the King reference merely discloses a laminated covering roofing shingle and fails to disclose a laminated starter shingle.” King does not disclose that his shingle is a starter or covering shingle; there has to be a shingle starting at the eaves edge, the starter shingle, and the next course of shingles, the covering shingle, covers the eaves edge shingles, or the starter shingle.

Thus unlike what applicant argues the King reference does not disclose the Structure of a Standard Laminated Covering Shingle and the King reference is silent as to the use as a starter shingle because king is not limited to be used as either a starter or covering shingle alone.

Indeed, the King reference are intended to provide both weather resistance and an attractive appearance, but the same can perform this function if it is placed at the eaves edge or shingles used to cover the shingles at the eaves edge.

Applicant also argues the King reference Does Not Have the Required Structure of a Starter. Applicant argues that “one of ordinary skill in the art would understand that the term "starter shingles" means unique shingles applied at the eave prior to the application of the covering shingles. Starter shingles have unique structural requirements. First, a starter strip must be uninterrupted and free of tabs or slots to prevent leakage of water to the roof deck. Second, starter shingles must have a minimum of two layers of shingle material at all locations on the roof. The two layers of a starter strip provide protection beneath the first course of standard shingles where

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them is no head lap layer from a lower course of shingles. Additionally, the two layers of a starter shingle provide protection between the tabs of standard shingles in a subsequent covering course. The purpose of a starter strip is to provide a base for subsequent courses of covering shingles and to ensure proper weatherproofing of the roof system by sealing gaps beneath the covering shingles. A starter shingle must provide these functions while providing an attractive appearance when installed beneath the covering shingles.” Applicant’s claims are not supported by a manual or reference book for roofing and not by an expert in the art such as a known licensed and bonded roofing expert, in the form of an affidavit or declaration, etc..... In addition, the king reference is not the base reference and the only secondary reference. The base reference of Diamond discloses a starter shingle with the supposed/alleged required elements as applicant has outlined above except the lamination which is taught also by Steiner. See above.

Applicant also argues the bottom layer of the King Reference is Not a Laminated Layer. The king is not the only reference considered; see Steiner.

Applicant continues to argue, “the Suggested Structure is Inoperable for Its Intended Purpose. As explained in Applicant’s response dated October 6, 2008, at page 8 beginning in the last paragraph, the combination of the cited references, as suggested by the Examiner, results in a structure that is inoperable for its intended purpose as a starter shingle for several reasons.” Applicant continues to argue against the king et al reference; while this reference is not used alone; neither, is the king et al reference the base reference. Applicant does not argue the other references applied



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against the claims and certainly does not argue with any detail. Applicant also does not argue the Steiner reference which has many of the required elements of a starter shingle. See rejection above.

Applicant also argues, "the King Reference cannot be Modified to be a Starter Single" The king reference is not the base reference and not meant to be modified. The base reference of Diamond is the base reference which is meant to be modified. Further the teachings of Steiner and King are not bodily incorporated into the base reference of Diamond. The teachings of the secondary reference are not bodily incorporated into the base reference. The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

All three references teach what is known in the art of roofing and variations thereof. One of ordinary skill in the art would have been able to make the recited roofing shingle.

In conclusion the combined Diamond, King and Steiner references do provide a roof covering including a starter shingle laid at an eave edge of a roof deck; see diamond reference. The starter shingle has an overlay sheet and an underlay sheet, king and Steiner, wherein the rear surface of the overlay sheet is attached to the front surface of the underlay sheet, thereby forming a laminated starter shingle. The roofing

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covering further includes covering shingles laid above the course of starter shingles and arranged in a side-by-side relationship and vertically offset from the coveting shingles in adjacent courses, see diamond. The height of the overlay sheet is greater than a height of the underlay sheet. See above rejection. See Steiner.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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